Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

RECEIVED
MAY 30 1996
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of	)	
	)	
Implementation of the Local Competition	)	CC Docket No. 96-98
Provisions in the Telecommunications Act	)	
of 1996	)	

DOCKET FILE COPY ORIGINAL

REPLY COMMENTS OF MFS COMMUNICATIONS COMPANY, INC.

David N. Porter
Vice President, Government Affairs

MFS COMMUNICATIONS
COMPANY, INC.
3000 K Street, N.W., Suite 300
Washington, D.C. 20007
(202) 424-7709

Andrew D. Lipman
Russell M. Blau
SWIDLER & BERLIN, Chartered
3000 K Street, N.W., Suite 300
Washington, D.C. 20007
(202) 424-7500
Fax (202) 424-7645

Attorneys for
MFS Communications Company, Inc.

May 30, 1996

No. of Copies rec'd 0+16
List ABCDE

Table of Contents

Summary

The 1996 Act has created an historic opportunity for the development of effective local exchange competition in this country. But, achievement of the statutory goals requires decisive leadership by this Commission The Commission should reject the nay-saying of the incumbent LECs, and should prescribe detailed, specific national rules to implement the duties imposed by Sec. 251. National rules are contemplated by the language of the Act, will help focus negotiations and narrow the range of disputes among carriers, and should recognize the role of the States in determining specific rates, terms, and conditions that are not inconsistent with the statutory requirements.

In implementing the pricing standard of Sec. 252(d)(1), the Commission should not attempt to prescribe a specific costing methodology. As attractive as LRIC-based pricing is in theory (and recognizing that it is the only standard consistent with the statutory language), application of this standard in regulatory proceedings is impractical and imprecise. Instead, the Commission should concentrate its resources on developing pricing rules that will allow market forces to set the proper level of prices. These rules, as outlined in MFS' initial Comments, would draw upon and integrate the resale, unbundling, and public notice requirements of the Act to assure rational pricing relationships between telecommunications services, and thereby facilitate the operation of market forces as the local exchange market begins to become competitive. Nonetheless, LRIC studies should be used as a guidepost for pricing those particular functions, such as collocation, that by their nature cannot be made subject to market pressures.

The Commission should prescribe specific standards for unbundling of the local loop, which is the quintessential "bottleneck" element of the ILEC networks. It should also reject the unfounded allegation of U S West that unbundling of the loop, or of any other network element, constitutes a "physical occupation" of ILEC property. Unbundled network elements remain the exclusive property of the ILEC, and they will be compensated for the use of this property. The requirement that the ILECs provide access to these elements is no more a "taking" than the existing common carrier requirement that they provide access to their networks on a nondiscriminatory basis.

The Commission should implement the collocation requirement of Sec. 251(c)(6) by significantly revising its existing expanded interconnection rules, and should not be deterred from this task by ILEC "taking" arguments. The statute provides express authority for physical collocation, and the Commission can and should determine that rates based on the incremental costs of collocation will provide "just compensation" as required by the Constitution. The statutory mandate for collocation is much broader than the policies adopted by the Commission under the former statute, and the implementing rules should be correspondingly broad. Restrictions on where collocation will be permitted and what types of equipment will be authorized should be eliminated, subject only to an ILEC's demonstration of lack of space or technical justification for limiting collocation.

In implementing the resale provisions of the Act, the Commission should adhere to its tentative conclusion that limitations and conditions on resale are inherently suspect, and should require the proponent of such restrictions to demonstrate affirmatively that they are reasonable and nondiscriminatory. Wholesale prices should be based strictly on the statutory standard of "avoided cost," not on short-cuts that rely on arbitrary fully-allocated cost techniques. The Commission should reject all efforts to go beyond the avoided cost standard by adding on bonuses or discounts for resellers that are not justified by actual cost savings for the ILEC. Further, the Commission should reinforce the statutory distinction between unbundling and resale by clarifying that access to unbundled elements cannot be used as a way to "repackage" services that are the same as ILEC wholesale services.

On the crucial issue of reciprocal compensation, the Commission should confirm that the express language of the statute compels compensation for traffic exchange that is equal in amount and uniform in structure for both carriers. Any unequal compensation scheme, or rate structure that is tied to the ILEC's network design, is not "mutual and reciprocal" and therefore is inconsistent with the Act. Reciprocal compensation should be based upon a single, uniform, and reciprocal rate per minute of use, which should be equal to a reasonable estimate or approximation of the long-run economic cost of transport and termination using an optimal network design. The statute does not authorize the Commission either to mandate or to prohibit bill-and-keep arrangements. The rules should, however, encourage compensation arrangements based upon economically efficient costs, rather than bill-and-keep.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of the Local Competition	)	CC Docket No. 96-98
Provisions in the Telecommunications Act	)	
of 1996	)	

REPLY COMMENTS OF MFS COMMUNICATIONS COMPANY, INC.

MFS Communications Company, Inc. ("MFS"), by its undersigned counsel, hereby submits its reply comments on the *Notice of Proposed Rulemaking* in the above-captioned docket (FCC 96-182, released April 19, 1996) (the *"NPRM"*).[1]

I. INTRODUCTION AND OVERVIEW

The *NPRM* attracted an unusually large number (and volume) of comments, which is not surprising considering the wide scope and critical long-term implications of this proceeding for the future structure of the U.S. telecommunications industry. The comments confirm what was already evident—that the Commission, despite the limited time available to it, must consider carefully the consequences of its decisions in this docket. The 1996 Act has created an historic opportunity for the development of effective local exchange competition in this country. Achievement of that Congressional goal, however, will not be automatic. The incumbent local exchange carriers ("ILECs") continue to exercise monopoly control over essential bottleneck facilities. Vigorous and effective enforcement of the access, unbundling, resale, interconnection and interoperability

[1] All abbreviations and citation forms not defined herein are the same as those used in MFS' initial Comments in this docket, filed May 16, 1996. All other parties' initial comments in this docket are cited simply by party name and page number; *e.g.*, "MFS at ---."

provisions of the 1996 Act is required to assure that these bottlenecks will be open to all competitors on fair, reasonable, and nondiscriminatory terms.

It has been impossible given the time and page constraints imposed on these reply comments, to address many of the arguments presented in the opening round of comments. Although the issues discussed below are some of the most important ones in this docket, MFS stands by the positions on other issues presented in its opening comments.

In its initial Comments, MFS suggested a number of general principles that should guide the Commission in its implementation of the 1996 Act. Upon review of the other parties' comments, a few additional principles suggest themselves. First, in implementing the pricing provisions of the Act, the Commission should strive to identify pricing rules that will facilitate, not prevent, the operation of competitive market forces. It is well understood and generally accepted that regulation is a very blunt instrument for determining costs and setting prices. The Commission should focus on fostering the operation of market forces by breaking down barriers to entry, opening up networks, requiring rational price structures, and facilitating the availability of pricing information, rather than seeking to achieve an impossible level of precision in setting rate levels.

Second, the Commission should establish the boundaries within which the States will implement the requirements of the Act. This role was expressly envisioned by Congress. The Commission should not unduly limit the States' options, but it should also fulfill the legislative mandate to assure that State decisions are not inconsistent with statutory requirements.

Third, **the statute means what it says.** Many parties (mostly, but not entirely, ILECs) seem to have identified various parts of the statute that they do not like, and are vigorously urging the Commission to "interpret" the statutory language to mean something entirely different. These arguments are too late. If a party thought that the reciprocal compensation standard should have included recovery of embedded costs, or that the wholesale pricing standard was too restrictive, it had the opportunity to present its arguments to Congress. This Commission should heed the plain intent of the statute in its implementing rules.

II. THE COMMISSION SHOULD ESTABLISH COMPREHENSIVE, DETAILED MINIMUM STANDARDS FOR COMPLIANCE WITH SEC. 251 (¶¶ 25-42, 50-51, 67-68, 77-80, 117-120)

A threshold decision confronting the Commission is whether to prescribe detailed, substantive rules implementing Sec. 251, or to prescribe minimal rules that leave most of the substantive issues to be resolved in negotiations and State arbitration proceedings. In the initial comments, the "minimalist" approach was supported only by the ILECs, who stand to gain from any delay and uncertainty in resolving the specific scope of their obligations under Sec. 251, and by some of the State commissions who expressed concern that their jurisdiction and authority would be circumscribed by overly detailed Federal rules. Nonetheless, several State regulators expressed support for Federal rules that would provide guidance to the States or establish minimum standards for compliance with the 1996 Act, as long as the rules did not restrict the States' ability to exercise those functions committed to them by the statute.[2]

A. Detailed Implementation Rules Will Facilitate Voluntary Negotiations

Many ILECs argue that the Commission should not seek to prescribe particular forms of interconnection or unbundled access by regulation, but should instead allow interested telecommunications carriers to determine these matters by negotiation. BellSouth takes this position to its most

[2] *See* Massachusetts Dep't of Public Utilities ("DPU") at 5; Michigan Public Service Commission ("PSC") at 4; North Dakota PSC at 1-2; Public Utility Commission ("PUC") of Texas at 4.

ridiculous extreme—on nearly every issue posed in the *NPRM*, BellSouth's response in essence is that the Commission should do nothing in order to avoid interfering with private negotiations.[3] There are several glaring flaws in this argument.

First, Sec. 252(a)(1) expressly provides that an ILEC "may negotiate and enter into a binding agreement with the requesting telecommunications carrier . . . *without regard to the standards set forth in subsections (b) and (c) of section 251.*" (Emphasis added.) Commission rules providing substantive interpretation of the Sec. 251(b) and (c) duties, therefore, would be inapplicable as a matter of law to negotiated agreements. Contrary to the ILECs' implication, Commission rules would in no way limit the range of negotiation options available either to ILECs or to requesting carriers.

Second, the Act recognizes that voluntary negotiations may be unsuccessful, and provides for binding arbitration in which the standards of Sec. 251(b) and (c) *do* apply. Federal rules establishing the scope of these standards would be invaluable in assisting the State commissions in performing their arbitration duties. As AT&T pointed out in its comments, "Uncoordinated price arbitrations in each of the 50 states—hindered by the same ILEC efforts to thwart competition that led Congress to impose federal standards—would yield a patchwork of differing and unpredictable pricing outcomes that would render effective voluntary solutions all but impossible."[4] The same is true of arbitration of other issues besides price. If the Commission were to abstain from regulation

---

[3] *See, e.g.,* BellSouth at 13, 20, 23 (interconnection), 24-25 (collocation), 28-29 (unbundling), 30-31 (definition of network elements), 38 (local loop specifications), 48 (pricing standards), 58 (rate structures).

[4] AT&T at 45-46.

in order to facilitate the negotiation process, it would also have to abdicate its statutory responsibility to guide the arbitration process.

Third, as MFS and others argued in initial comments, detailed regulations will in fact improve, not interfere with, the prospects for successful voluntary negotiation. For example, the Department of Justice said:

> We share the Commission's view that its articulation of pricing principles and/or parameters would lower barriers to entry by increasing the predictability of rates and thereby facilitate negotiation, arbitration and review of agreements between ILECs and new entrants.[5]

The fact that Congress had to pass a law *requiring* the ILECs to engage in good-faith negotiations, Sec. 251(c)(1), is strong evidence of the need for regulatory guidance. Without the legal compulsion of the Act and the threat of binding arbitration, ILECs would have little if any incentive to reach agreements with their competitors. Unlike normal commercial negotiations, the ILEC does not face any risk that its potential customer (the requesting carrier) will buy from someone else if its position is too harsh, because there is no one else. If the customer chooses not to buy at all because the price is too high or the service inadequate, the ILEC would benefit by removing a potential competitor from its markets.

The only factors influencing the ILEC and the requesting carrier to reach a compromise are the knowledge that, if they do not, a regulator will impose an agreement upon them, and the risk that the arbitrated outcome will be less favorable than a negotiated agreement. Detailed Commission rules will provide the parties with better information as to the likely outcome of any arbitration. This

[5] U.S. Department of Justice ("DOJ") at 25.

information will assist both parties in assessing the risks that they face if they do not reach agreement, and should thereby facilitate agreement.

MFS' own experience bears out this observation. Subsequent to the first round of comments in this docket, MFS reached a comprehensive, region-wide agreement with Ameritech for interconnection, reciprocal compensation, number portability, access to unbundled loops, and related arrangements. Significantly, even though (as noted above) the two carriers were not legally required to comply with the standards of Sec. 251(b) and (c) in their voluntary agreement, the agreement actually tracks the provisions of those subsections quite closely. The reason for this is quite simple—Ameritech had no incentive to give MFS anything more than it was required to do under the Act, and MFS had no incentive to accept anything less than it was entitled to under the Act. Therefore, the negotiation essentially was a search for commercial terms that would satisfy the legal requirements imposed by the Act. If the parties to a negotiation cannot even agree on what the law requires (and, therefore, do not share a common view as to what will happen if they submit their dispute to arbitration), they will face far more difficulty in attempting to agree on a way to fulfill those requirements. Detailed regulations will narrow the scope of such disagreements and therefore promote negotiated agreements [6]

B. Detailed Minimum Standards Are Consistent with the States' Role Under Section 252

The 1996 Act indisputably made significant changes in the relationship between Federal and State regulators in the field of telecommunications. Section 251 establishes substantive duties that apply to various classes of telecommunications carriers without respect to traditional jurisdictional

[6] *See* Competition Policy Institute at 10.

dividing lines, and directs this Commission to adopt regulations implementing these duties. Section 252, on the other hand, assigns the State commissions a key role in arbitration and approval of negotiated agreements pursuant to Section 251, again without regard to traditional notions of jurisdictional separation. It is to be expected that this new statutory scheme has generated some friction between this Commission and its State counterparts concerning their respective roles and responsibilities in carrying out the new provisions. Nonetheless, the statutory language makes it clear that Congress intended this Commission to establish national standards that will be applied by the States. Not only does Sec. 251(d)(1) explicitly direct the Commission to prescribe regulations to implement the provisions of Section 251, but Sec. 261(c) even more broadly provides that any "requirements" imposed by a State on a telecommunications carrier after the effective date of the 1996 Act must not be "inconsistent with this part [II of Title II] or the Commission's regulations to implement this part." It is therefore clear that, while the States have been assigned considerable authority with respect to review of interconnection and access arrangements, they must exercise that authority within the boundaries established by this Commission's national regulations.

As MFS outlined in its initial Comments, the Commission can fulfill its duties under Sec. 251 without impairing the States' prerogatives by establishing minimum standards that each ILEC must fulfill in order to comply with its duties under subsections (b) and (c). Many of the State regulators appear to endorse this approach in their comments.[7] Although some States express concern that the Commission's implementing regulations may conflict with the regulations or

[7] *See* Florida PSC at 2; Kansas Corporation Comm'n at 2-4; *see also* Ohio Office of Consumers' Counsel.

statutes some States have already adopted to implement local exchange competition,[8] it is noteworthy that none of the States has pointed to any material conflict between the approaches set forth in the *NPRM* and a particular State's existing regulations.[9] To the contrary, most States acknowledge that, at least in those States that have already acted to establish local exchange competition, the existing State regulatory frameworks are largely consistent with the 1996 Act and with the Commission's tentative approach to implementing that Act.[10]

Other States express concern that the FCC's implementing regulations may not leave room for flexibility in areas where local anomalies deserve special treatment.[11] This concern too seems largely theoretical. First, most of these concerns may be resolved under the Act's provisions providing for exemptions and modifications for certain rural or small telephone companies. Second, even the most clear and detailed regulations must accommodate the flexibility required by ever-changing technologies, *see* MFS at 4-5, and therefore must allow the States the ability to adapt their policies to any special local conditions. Finally, there can be no doubt that the FCC's implementing regulations will require fine tuning over time as experience enlightens the new regulatory process. However, these issues do not in any way detract from the need to adopt clear and concise uniform

---

[8] Iowa Utilities Board at 3-4; PUC of Ohio at 3, 7, 16.

[9] There are a few instances, as outlined in MFS' initial comments and in various separate proceedings now pending before the Commission, in which individual States have adopted statutes, regulations, or practices that are squarely inconsistent with the terms of the Communications Act itself. These inconsistent State requirements must be preempted regardless of the scope or contents of the regulations the Commission adopts in this proceeding.

[10] *See* NARUC at 8.

[11] Idaho PUC at 4; Oklahoma Corporation Comm'n at 2; North Carolina Util. Comm'n Public Staff at 5-6.

implementing regulations in the first instance. Indeed, it takes little imagination to envision the chaos that could ensue if all 50 States undertook to implement their own "bottoms up" regulations without the detailed unifying guidance Congress intended this Commission to provide.

The Commission should remain conscious of the States' role in implementing the 1996 Act, and its regulations should allow the States sufficient flexibility to carry out their authority with respect to interconnection as well as universal service and end-user pricing. Nonetheless, this Commission also has a critical role to play in establishing national regulations to interpret and apply the provisions of Sec. 251, and it should not be dissuaded from fulfilling that role.

III. INTERCONNECTION, COLLOCATION, AND ACCESS TO UNBUNDLED NETWORK ELEMENTS

A. Pricing Standards (¶¶ 123-148)

1. The Commission Should Adopt a Market-Driven Pricing Model for Network Elements

In its initial Comments, MFS observed that while economic theory stipulates that long-run incremental cost (LRIC) is the starting point for determining efficient market prices, application of this standard in practice raises numerous difficulties. The comments of other parties reinforce MFS' views. Although the Commission's goal should indeed be to drive the prices of network elements towards LRIC-based levels, the way to reach this goal is not through a myriad of rate proceedings in which the ILECs hold all the relevant information about their costs, but rather by adopting a coherent system of pricing rules designed to allow the operation of competitive market forces.[12]

Nearly every party agrees that LRIC is at least relevant in determining prices, although they dispute vigorously whether ILEC's should be allowed to recover various other amounts in addition to LRIC. Practically the only dissenting view was that of NYNEX, but its arguments were internally inconsistent. NYNEX argued that historical accounting costs drawn from the Commission's Part 32 costing rules should be used to establish the costs used for setting interconnection and unbundled network element rates.[13] Two pages later in its comments, however, NYNEX argued that the Commission should not use existing access charges to set the bounds of interconnection charges because those rates were the product of the Commission's Part 36 and 69 rules, which are fundamentally not cost based.[14] NYNEX evidently seeks to use historical cost accounting methods when it benefits NYNEX, but reject them when the result would not support NYNEX's economic interests.

[12] MFS stresses that the market-driven pricing rules presented in its initial Comments (MFS at 53) are interrelated and therefore inseverable. If the Commission were to pick and choose among these proposals, adopting some elements but not others, or adopting them in modified form, it is unlikely that the intended benefits of the plan would emerge. For example, the rule requiring prices of each wholesale service to be at least equal to the sum of tariffed rates for network elements used in providing the respective service is intended to prevent ILECs from imposing greater costs on one class of competitors or customers than another. The requirement that all ILEC service arrangements be made public and available for resale prevents discrimination, and promotes the operation of an efficient market by making information equally available to all participants. Other elements of the proposal create a system of checks and balances, so that an ILEC pricing action in response to competition in one segment of the market will produce efficient and market-based results in other segments. The Commission should consider this proposal as an integrated system, not as a mere collection of discrete elements.

[13] NYNEX at 55-56.

[14] NYNEX at 58.

Although a number of parties expended copious amounts of paper and retained learned economic consultants to address the merits of LRIC on a theoretical level,[15] few of them bothered even to address the difficulties with practical use of this theory in regulatory proceedings. The only expert who did discuss in any detail the empirical problems of measuring LRIC, William Page Montgomery on behalf of ALTS, confirms that the preparation of LRIC studies by ILECs implicates many complex and contentious methodological issues.

To put it bluntly, review of LRIC studies is a quagmire. All of the underlying cost data is under the control of the ILEC, who determines which data sources to use and how to present the information. The cost studies are often voluminous, sometimes containing many thousand pages of supporting workpapers, and the process of reviewing them is costly even for a company the size of MFS. For smaller companies seeking to enter the local exchange market, the burden of reviewing these studies could be insurmountable. If a company does undertake to review the cost studies, its witnesses will have the unenviable task of trying to understand within a few weeks a cost study process that the ILEC may have spent months or years developing, perhaps containing thousands of equations and algorithms, and then to identify any methodological deficiencies or data errors. They are often handicapped in this process by strict confidentiality orders which limit their ability to consult with specialists in other disciplines (for example, with engineers concerning network design and utilization assumptions). Even at best, if a witness can actually identify a flaw in the cost study, it is generally impossible to quantify the effect of the problem on the final result of the

[15] *See, e.g.*, ALTS at 35-37 and Montgomery Affidavit; AT&T at 46-54, and Affidavit of William Baumol, Janusz Ordover and Robert Willig; Cable and Wireless ("C&W") at 32-36; DOJ at 28-32; Intermedia Communications Inc. ("ICI") at 25; National Cable Television Association ("NCTA") at 49-50, and Attachment, "Unbundling and Interconnection and Traffic Exchange," at 4-24; Sprint at 48-49; TCI at 26-27.

study, because correction of the error would require additional data that either does not exist or has not been made available by the ILEC. These difficulties would, of course, be amplified by the very limited time available for the State commissions to conduct arbitration proceedings under Sec. 252.

MFS' market-driven pricing strategy addresses or removes the need to address many of the objections raised by ILECs and other parties to LRIC-based pricing. For example, many parties argue about whether network element prices should include a "contribution" or "profit" element in addition to recovery of LRIC.[16] Under MFS' proposal, market forces would determine how much, if any, contribution could be recovered through network element prices. Any contribution built in to the price of a network element, however, would also have to be included in the price of wholesale and retail services that use that element. Therefore, an ILEC that tries to recover an excessive amount of contribution through network element prices would be putting itself at a competitive disadvantage in the market for bundled services. Since MFS' plan does not require that all network element prices be set equal to LRIC, the "takings" arguments raised by some ILECs would be moot.[17] Since there would be no ceiling on network element prices, other than the ceiling imposed by market forces, there would be no basis for claiming that government regulation prevents any ILEC from earning a return on its investment.

In any event, the ILEC objections to LRIC-based pricing are without merit. Generally, these arguments amount to a claim that LRIC-based prices would not allow ILECs to recover their joint

[16] *See, e.g.*, Ameritech at 62-79; Cincinnati Bell at 30; GTE at 61; PUC of Ohio at 41-47 (LRIC plus joint and common costs plus a 10% "adder"); Rural Telephone Coalition ("Rural") at 26-29; Sprint at 43-44; TCA, Inc. at 8; PUC of Texas at 23; USTA at 41-46.

[17] *See, e.g.*, Bell Atlantic at 36-38; Cincinnati Bell at 30; GTE at 65-71; Pacific Telesis ("PacTel") at 65-67; US West at 25-28; USTA at 44-46.

and common costs, and therefore would force them into bankruptcy.[18] There are several critical flaws in the argument. First, the argument could be valid only if the ILECs were required to price *all* their services to all customers at LRIC, but nobody has proposed that. If ILECs continue to price their access services, local telephone services, vertical services, and toll services at current levels, then it is simply not true that pricing interconnection and unbundled network elements at LRIC will cause ILECs to fail to cover their total costs. Interconnection and access to unbundled network elements are new offerings, and a LRIC-based competitive pricing standard requires that the price of those new offerings cover the additional costs of those new offerings. If ILECs' existing prices cover their total costs today, they will still cover their total costs if they offer new services (interconnection and access to unbundled network elements) at prices that cover the incremental costs of the new services.

Second, the ILEC argument generally assumes that these companies have a perpetual entitlement to recover their historical costs. Even if prices set at LRIC did not cover the ILECs' embedded costs, there is no evidence that such prices would fail to cover ILECs' forward-looking costs in a competitive environment. The ILECs' historical costs are the inflated, inefficient costs of incumbent monopoly service providers. ILECs do not have reputations for being paragons of efficiency. Universally, telecommunication incumbents have responded to competition by sharply

[18] *See*, *e.g.*, Bell Atlantic at 35-36; BellSouth at 52-53; Cincinnati Bell at 25; NYNEX at 50-51; PacTel at 68-69; Rural at 25-27; Texas Statewide Telephone Cooperative at 14; USTA at 38-43.

reducing their costs.[19] One would expect the ILECs to similarly reduce their costs when confronted with competition so that prices set at LRIC may prove to be remunerative.

Third, irrespective of whether one believes that telephone services generally are subject to economies of scale, there is absolutely no evidence that suggests that interconnection, access to unbundled network elements and collocation are subject to economies of scale or economies of scope.[20] In other words, there is no reason to expect that the average costs of access to unbundled network elements will decrease as the number of unbundled elements increases, or that the average cost of interconnection or collocation will be smaller if there are more interconnectors and collocators. If there are no economies of scale or scope in the provision of interconnection, access to unbundled network elements and collocation, then prices set at LRIC for these particular items will cover or exceed total costs

Fourth, if LRIC could be computed reliably and objectively (which, as noted above, is practically impossible to achieve in practice), it would include most of what the ILECs are trying to characterize as joint and common costs. *See* MFS at 54 n.63. AT&T, for example, showed that a properly constructed LRIC analysis includes the majority of common costs, so realistically, there

---

[19] For example, since divestiture, AT&T has cut more than 150,000 jobs in spite of revenues and earnings that have grown to record high levels. This is stark evidence that AT&T—the incumbent in the long distance industry—maintained a cost structure that was far from competitive. One would expect incumbent LECs to display similar cost cutting if and when they are confronted with significant competition.

[20] *See* AT&T, Affidavit of William Baumol, Janusz Ordover and Robert Willig at 13. "The aggregative categories of network elements generally comprise discrete physical facilities -- loop, switching, transport, and signaling. Economies of scope, or cost subadditivities, among these categories are likely to be minimal or nonexistent."

will likely not be a common cost allocation problem for the Commission to address.[21] Likewise, the Department of Justice contended that developing prices based on the TSLRIC of physical elements (e.g., network components) will minimize any unrecovered joint and common costs.[22]

Finally, the ILECs' argument is completely contrary to the public positions the Bell Operating Companies ("BOCs") took when debating the merits of the Telecommunications Act. The ILECs' claim that prices set at LRIC-based competitive levels will fail to cover total costs is true only if they operate under increasing returns to scale.[23] Essentially, in this proceeding the ILECs assert that the provision of local telephone is a natural monopoly. The BOCs' champion during the Telecommunications Act debates, Peter Huber, claims just the opposite in his testimony before Congress on behalf of the BOCs and in his publications. For example, the first paragraph and the introduction of his book *The Geodesic Network II* proclaim that the local telephone market is <u>not</u> a natural monopoly characterized by declining average costs, and that there substantially less expensive means of providing local service to customers:

---

[21] AT&T at 62.

[22] DOJ at 32.

[23] As a matter of basic economic theory, a firm that sets all of its prices at LRIC will cover its total economic costs and will exceed its total economic costs if it operates under conditions of constant returns to scale or decreasing returns to scale. See, *e.g.*, R. L. MILLER, INTERMEDIATE MICROECONOMICS 304-305 (1978) or just about any basic microeconomic text. Increasing returns to scale mean that average unit costs decrease as volume increase. Constant returns to scale mean that average unit costs are constant as volume increases. If adding consumers or volumes has little impact on a firm's average costs, the firm displays constant returns to scale, and price set at LRIC will yield revenues sufficient to cover total costs. Decreasing returns to scale mean that average unit costs increase as volume increases. Large firms are sometimes thought to display decreasing returns to scale as a result of coordination and various transaction costs (*e.g.*, bureaucracy, inflexible standards and procedures). Arguably, many of the largest ILECs have grown so big and bureaucratic that they display decreasing returns to scale.

> Low-volume, local exchange service is a natural monopoly, high-volume long distance service is not. In 1982, the Bell System was broken into eight pieces on the strength of that assumption. But now it is clear that the assumption was wrong. In fact, it was worse than wrong: the architects of the Bell divestiture got it backwards. If there is going to be a monopoly, it will be in the long-distance market. The local exchange should be—and soon will be—competitive. . . .
>
> The increase in available spectrum and the outpouring of new competitors will place tremendous pressure on the local copper loop. The numbers are strikingly clear. Copper loop averages between $1,200 and $2,000 per access line. Today's cellular industry, by contrast, has invested a total of $10 billion (roughly) and already serves 10 million customers. Copper technology is stagnating, but every few years, radio technologies grow more reliable and less expensive. If local telcos were to rebuild from scratch today, they would do so mostly from radio, at a cost of about $800 per subscriber. The main thing that discourages them from doing so is the billions upon billions they have invested in what is now obsolete copper plant. It is difficult, after all, to embrace the technology that is going to wipe tens of billions of dollars of underdepreciated assets off your balance sheets. Newcomers in the radio market don't have that problem, however, and the local telcos will either adjust or be swept aside. "Make no mistake about it," George Calhoun declares in his seminal Wireless Access and the Local Telephone Market, "we are witnessing the beginning of the end of the natural monopoly."[24]

If Huber is right, then the ILECs' claims in this proceeding that LRIC based prices will fail to cover costs are flat wrong. Huber probably is correct in his observation that the ILECs are opposed to LRIC-based prices because they will fail to cover the ILECs' costs and investments in obsolete plant. The Commission should recognize that the ILECs' opposition to LRIC prices based on assertions of economies of scale is an argument of convenience, asserted solely to protect and guarantee recovery of their investment in obsolete copper plant.

2. LRIC Should Be Used as a Guideline for Collocation and Interconnection, Where Market-Driven Pricing is Impractical

Although MFS believes that market-driven pricing should be the Commission's primary tool for implementing the pricing requirements of the 1996 Act, it recognizes that this strategy cannot

[24] P. Huber, THE GEODESIC NETWORK II, 1-4 (1995).

work in all situations. Market-driven pricing assumes that a market exists; that is, that the ILEC faces competition at some level (whether for network elements, for wholesale services, or for retail equivalents) that will allow the forces of supply and demand to operate. Where a market cannot operate because there is no possible substitute for the facility or service being obtained from the ILEC, then other methods of price regulation (however imperfect) must be employed.

In the case of collocation pursuant to Sec. 251(c)(6), as well as charges for interconnection for "the transmission and routing of telephone exchange service and exchange access" pursuant to Sec. 251(c)(2), there is no substitute to dealing with the ILEC, because what is being purchased is access to the ILEC's premises or network itself. Other carriers can build central offices, but they cannot provide access to *the ILEC's* central office. Other carriers can build their own network facilities, but they cannot use those facilities to route traffic to or from ILEC customers without purchasing interconnection from the ILEC.[25] Market-driven pricing rules therefore would not be effective to constrain the prices of these particular arrangements, and these prices must necessarily be based upon LRIC studies or other reasonable approaches to measuring economic costs. *See* MFS at 30-32.

[25] Market-driven pricing may be feasible for some discrete elements of interconnection, however, if these elements consist of facilities, equipment, or services that are also made available on an unbundled basis for other purposes. For example, if fiber-optic transmission facilities are provided as an element of interconnection, the pricing of similar facilities as an unbundled network element may serve as a surrogate for determining interconnection pricing.

B. Unbundling of Network Elements

1. The Commission Should Prescribe Minimum Technical and Performance Standards for Unbundled Loops (¶¶ 94-97)

There was little dispute among the parties that the 1996 Act requires ILECs to unbundle their local loops. Even the ILECs generally acknowledged this obligation, albeit in many cases arguing that the Commission should not take action to implement the obligation but instead should defer to the negotiation process and State arbitration decisions. The ILECs, however, fail to acknowledge the many advantages that minimum national requirements are likely to offer, and also tend to disregard the fact that the Commission's inquiry is directed toward *minimum* requirements. The Commission correctly recognizes that such requirements would be particularly beneficial to new entrants, enabling them to take advantage of economies of scale and to plan and deploy networks stretching across state and LEC boundaries. *NPRM,* para. 79.

The Commission is also correct in its belief that minimum national requirements may ensure some level of network and equipment interoperability. Although Pacific Telesis states that national manufacturers design and build their equipment to the standards set by various industry standards bodies, and that those bodies have long since established the technical requirements for each network element,[26] at least one such manufacturer strongly supports establishing national baselines for interconnection and unbundling. Noting that manufacturers potentially face significant hurdles in adapting telecommunications equipment to operate under a new competitive paradigm, Nortel

[26] Of course, this argument by PacTel correctly refutes the suggestions by some other ILECs that minimum national standards are impracticable because of differences in the systems utilized by various telephone companies.

concludes that by establishing national baselines, manufacturers will be able to roll-out new functionalities in an orderly manner consistent with one set of priorities. Nortel at 11.

The Commission should therefore adopt minimum performance and technical standards for unbundled loops, as outlined in MFS' initial Comments at 42-46. These standards should not leave entirely to the discretion of the ILEC the technical characteristics and capabilities of the loop, but should specify that the ILEC is required upon request to provide access to any type of loop facilities and transmission capabilities that are available within its network. The ILEC must be required to make available to requesting carriers any loop upgrades or conditioning (*e.g.*, upgrading loops to meet ISDN transmission standards) that it performs for its own retail customers.

2. Loop Unbundling is Not a "Taking of Property"

U S West, alone among the ILECs, asserts the preposterous argument that unbundling of loops constitutes a "physical taking" of its property.[27] The argument is preposterous because, as a factual matter, unbundling does not involve any physical "occupation" of an ILEC's property. Rather, the ILEC makes the unbundled network element available for use by a requesting carrier, just as it makes its facilities available for use by its other customers. The physical facilities remain the property of, and under the exclusive control of, the ILEC. In the case of an unbundled loop, the wires and cables remain property of the ILEC; the ILEC remains responsible for maintenance and repair of these facilities; the ILEC remains able to rearrange and modify its facilities; and, if it chooses to take a particular wire or cable out of service, it continues to own the copper or glass and

[27] U S West's purpose in making this argument appears not to be avoidance of the requirement to unbundle, but rather to claim entitlement to an inflated level of compensation under the Takings Clause of the Fifth Amendment. Even if it could establish a takings claim, however, it would not necessarily follow that an ILEC would be entitled to any compensation beyond that allowed under the pricing standard of Sec. 252(d)(1). *See* pages 23 *et seq.*, below.